

[illegible]

The present invention provides methods for conferring a neuroprotective effect on a population of cells in a subject following a traumatic injury to the central nervous system. Specifically, the methods of the invention provide for the administration of a progestin or progestin metabolite following a traumatic brain injury. The progestin or progestin metabolite is administered at therapeutically effective concentrations that produce a neuroprotective effect (i.e., a decrease in the loss of neuronal activity) and reduces and/or prevents the various physiological events leading to neurodegeneration, such as, cerebral edema and the immune/inflammatory response.